Notes from October 11, 2004 TeV BPM Upgrade Meeting Stephen Wolbers

Echotek Results using Fake Input Signals on the Test Bench Jim Steimel

- Jim's transparencies can be found in the AD doc DB #1407.
- Jim's talk showed results that he has obtained using the test stand on FCC3 with fake input signals.
- = There were some questions/issues about the quality of the input signals and the electronics that produce them. This will come up later when the results are discussed.
- = At the moment no "position changes" have been made. All the signals should give the same position.
- = Jim has measured closed orbits only so far.
- = Jim had to adjust the frequency to use the exact digitization frequency. We will have to provide this capability automatically in future.
- Results were shown for 1, 2, 3, 4, 5, 6, 12, 18, 24, 30 and 36 bunches. These show some dependence of position on number of bunches. The standard deviation of the position measurement depends on the intensity, more or less as expected. See Jim's slides for details on all of these points.
- Jim further investigated and suspected that higher frequencies are being seen by the Echotek and affect the measurements.
- Adding a 70 MHz low pass filter reduced the position variation seen in previous measurements.
- Further investigations will focus on the test equipment, TBT measurements, etc. and will be reported in future meetings.